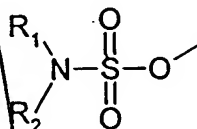


CLAIMS

1. A method of inhibiting steroid sulphatase activity in a subject in need of same, the method comprising administering to said subject a steroid sulphatase inhibiting amount of a ring system compound;

wherein the ring system compound comprises a ring to which is attached a sulphonate group of the formula



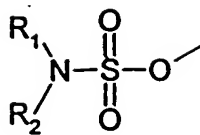
wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more hetero atoms or groups in the alkylene chain; and

wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2); and

wherein if the sulphonate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37°C it would provide a K_m value of less than 50 μM .

2. A ring system compound;

wherein the ring system compound comprises a ring to which is attached a sulphonate group of the formula



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more
5 hetero atoms or groups in the alkylene chain;

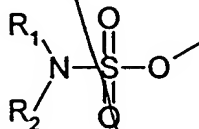
wherein R_1 or R_2 is H;

wherein said compound is an inhibitor of an enzyme having steroid sulphatase
10 activity (E.C.3.1.6.2); and

wherein if the sulphonamide group of said compound is replaced with a sulphate group to form a sulphate compound it would be a substrate for a steroid sulphatase enzyme (E.C.3.1.6.2).
15

3. A ring system compound;

wherein the ring system compound comprises a ring to which is attached a sulphonamide group of the formula
20



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more
25 hetero atoms or groups in the alkylene chain;

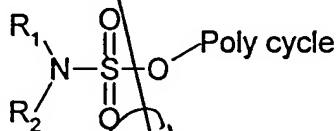
wherein R_1 or R_2 is H;

wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2); and

5 wherein if the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37°C it would provide a K_m value of less than 50 μ M.

4. A ring system compound;

10 wherein the ring system compound has the formula



15 wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more hetero atoms or groups in the alkylene chain;

wherein R_1 or R_2 is H;

20 wherein the group Poly cycle is a polycyclic ring structure

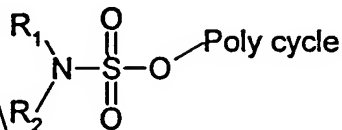
wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2); and

25 wherein if the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound it would be a substrate for a steroid sulphatase enzyme (E.C.3.1.6.2).

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5. A ring system compound;

wherein the ring system compound has the formula



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more hetero atoms or groups in the alkylene chain;

wherein R_1 or R_2 is H;

wherein the group Poly cycle is a steroidal ring structure

wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2); and

wherein if the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound it would be a substrate for a steroid sulphatase enzyme (E.C.3.1.6.2).

add a² >

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